BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work: Estimate for Improvements to Roads, drains and Asphalting at Vinyakanagar Balance roads in Ward No. 11(Kuvempunagara) in Vidyaranyapura Sub Division

			Est Cost Rs.					2000000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork **excavation by manual means in ordinary** soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 142 / Item No. 19.1, PWD SR 2016-17**	cum							
	RCC Drain Somanna layout 1st Cross		1	150.00	1.00	1.00	150.00		
	Drain Desilting								
	Vinayakanagara Cross Road W0119		2	45.00	0.45	0.35	14.18		
	Vinayakanagara Cross Road W0116		2	80.00	0.45	0.35	25.20		
	Vinayakanagara Cross Road W0123		2	75.00	0.45	0.35	23.63		
	Berm Cutting								
	Vinayakanagara Cross Road W0119		2	45.00	1.20	0.20	21.60		
	Vinayakanagara Cross Road W0116		2	80.00	1.20	0.20	38.40		
	Vinayakanagara Cross Road W0123		2	75.00	1.20	0.20	36.00		
	for chain link fencing foundation		1	30.00	0.75	0.75	16.88		
							325.88	199.36	**64968.00**
	Basic Rate	82.00							
	Add loading and unloading Charges **It No 17.1 KSRRB M 100-1**	68.00							
	Average weight of earth 1.28 tonne / kg for 11.90 Km = 1.28 T X 11.90Km X 2.5 / km= 38.08	38.08							
		188.08							
	Area Weightage @6%	11.28							
	Total	**199.36**							
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) **Page No. 25 / Item No. 5.33 PWD SR 2016-17**	Sqm							
	Vinayakanagara Cross Road W0119		2	35.00		1.35	94.50		
	Vinayakanagara Cross Road W0116		2	50.00		1.35	135.00		
	Vinayakanagara Cross Road W0123		2	30.00		1.35	81.00		
							310.50	80.56	**25014.00**
	Basic Rate	76.00							
	Area Weightage @ 6%	4.56							
	Total	**80.56**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix 1:4:8** with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation**, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.3 of PWD SR 2016-17**	Cum							
	RCC Drain Somanna layout 1st Cross		1	150.00	1.00	0.15	22.50		
	for drain repair		1	30.00	0.75	0.15	3.38		
	for chain link fencing foundation		1	30.00	0.75	0.15	3.38		
							29.25	5159.02	**150901.00**
	Basic Rate	4867.00							
	Area Weightage @ 6%	292.02							
	Total	**5159.02**							
4	KSRB 5.3-3 : Providing and constructing granite / trap / basalt size stone masonry in **basement with cement mortar 1:6**, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **Page No. 23 / Item No. 5.9, PWD SR 2016-17**	Cum							
	for chain link fencing I/F of Ayyappa swamy temple		1	30.00	0.75	1.50	33.75		
			1	30.00	0.45	0.45	6.08		
	for drain repiar I/F of Govt School		1	30.00	0.50	0.90	13.50		
							53.33	5305.30	**282905.00**
	Basic Rate	5005.00							
	Area Weightage @ 6%	300.30							
	Total	**5305.30**							
	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of mix 1:2:4** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, **in foundation, plinth and cills**, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. **Page No.12, Item No. 4.6 PWD SR 2016-17**	Cum							
	coping		1	30.00	0.45	0.10	1.35		
	for chain link fencing coping		1	60.00	0.45	0.15	4.05		
	drain coping		1	30.00	0.50	0.10	1.50		
							6.90	5767.46	**39795.00**
	Basic Rate	5441.00							
	Area Weightage @ 6%	326.46							
	Total	**5767.46**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
6	Providing and laying **cement concrete** using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete **(RMC) M 20** for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, **for raft foundation column footing , main and secondary beams** with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) **Page No. 18, Item No. 4.48, PWD SR 2016-17**	Cum							
	For RCC Drain bottom		1	150.00	0.90	0.15	20.25		
	side wall		2	150.00	0.15	0.75	33.75		
							54.00	6231.74	**336514.00**
	Basic Rate	5879.00							
	Area Weightage @ 6%	352.74							
	Total	**6231.74**							
7	KSRB 4-6.4 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for **vertical surface** such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 **Page No. 15 / Item No. 4.31 PWD SR 2016-17**	Sqm							
	RCC Drain Side Wall		4	150.00		0.75	450.00		
							450.00	310.58	**139761.00**
	Basic Rate	293.00							
	Area Weightage @ 6%	17.58							
	Total	**310.58**							
8	KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - **TMT bars Fe 500 Page No. 17 / Item No. 4.46.2, PWD SR 2016-17**	Tonne							
				54.00	0.060	T/cum	**3.24**	59413.00	**192498.00**
	Basic Rate	56050.00							
	Area Weightage @ 6%	3363.00							
	Total	**59413.00**							
9	Providing **precast slab of 100mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge- Data rate	Sqm							
	RCC Drain Slab		1	150.00	0.90		135.00		

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
							135.00	1760.00	**237600.00**
10	KSRRB 300-47. **Scarifying kankar / gravel /** metal crust upto 150mm thick with pick axes and disposal of stuff including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **Page No. 147 / Item No. 19.53 PWD SR 2016-17**	Sqm							
	Vinayakanagara Cross Road W0119		2	45.00	1.00		90.00		
	Vinayakanagara Cross Road W0116		2	80.00	1.20		192.00		
	Vinayakanagara Cross Road W0123		2	75.00	1.20		180.00		
	Basic Rate	25.00					**462.00**	26.50	**12243.00**
	Area Weightage @ 6%	1.50							
	Total	**26.50**							
	KSRRB M400- **Wet Mix Macadam** KSRRB M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **Page No. 158 / Item No. 20.18, PWD SR 2016-17**	Cum							
	Vinayakanagara Cross Road W0119		2	45.00	1.20	0.20	21.60		
	Vinayakanagara Cross Road W0116		2	80.00	1.35	0.20	43.20		
	Vinayakanagara Cross Road W0123		2	75.00	1.35	0.20	40.50		
	Basic Rate	1668.00					**105.30**	1768.08	**186179.00**
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							
2	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 **Page No. 161 / Item No. 21.6, PWD SR 2016-17**	Sqm							
	Vinayakanagara Cross Road W0119		1	45.00	4.50		202.50		
	Vinayakanagara Cross Road W0116		1	80.00	4.50		360.00		
	Vinayakanagara Cross Road W0123		1	75.00	5.00		375.00		
	Basic Rate	26.00					**937.50**	27.56	**25838.00**
	Area Weightage @ 6%	1.56							
	Total	**27.56**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
13	KSRRB M500-18. Providing and laying **semi dense bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 508 complete in all respects complete as per specifications. - using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (25 mm to 30 mm) with 5 % VG-10 Bitumen **Page No. 164 / Item No. 21.20.12 PWD SR 2016-17**	cum							
	Vinayakanagara Cross Road W0119		1	45.00	4.50	0.025	5.06		
	Vinayakanagara Cross Road W0116		1	80.00	4.50	0.025	9.00		
	Vinayakanagara Cross Road W0123		1	75.00	5.00	0.025	9.38		
	Basic Rate	6081.00					**23.44**	6445.86	**151075.00**
	Area Weightage @ 6%	364.86							
	Total	**6445.86**							
14	Supplying and fixing **M.S. Rectangular poles** made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineerin - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete) **Page No. 262 / Item No. 37.2, PWD SR 2016-17**	m							
	For Repairs		20	2.40			48.00		
	Basic Rate	819.00					**48.00**	868.14	**41671.00**
	Area Weightage @ 6%	49.14							
	Total	**868.14**							
15	Providing **chain link fencing 50mm size of 8 guage** properly stretched between existing rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint **Page No. 262 / Item No. 37.3, PWD SR 2016-17**	Sqm							
			1	40.00		1.80	72.00		
	Basic Rate	659.00					**72.00**	698.54	**50295.00**
	Area Weightage @ 6%	39.54							
	Total	**698.54**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
16	Providing and fixing **M.S. Block pipe of 38mm** dia, of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the existing two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint. **Page No. 262 / Item No. 37.4, PWD SR 2016-17**	m							
			3	40.00			120.00		
	Basic Rate	324.00					**120.00**	343.44	**41213.00**
	Area Weightage @ 6%	19.44							
	Total	**343.44**							
	Sub Total								**1978470.00**
	Third Party Inspection Charges @ 1%								**19785.00**
	Add for unforseen and rounding off	L/S							**1745.00**
								Total	**2000000.00**

Rupees Twenty Lakh(s) Only

ertificate:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2016-17.
3 This work included under 2016-17 POW Grant.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No. 11

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

12/01

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

12/01

Administrative Approval
Accorded For 20.00 lakhRs.
Head of A/C P177I
CER NO : 114 Dt: 12.01.17

TA CE (YNK)

TECHNICAL SANCTION
Accorded For Rs. Twenty Lakhs only
Head of A/c. P-1771
Div. Ref. No. 141/16-17 Date 12/01/17

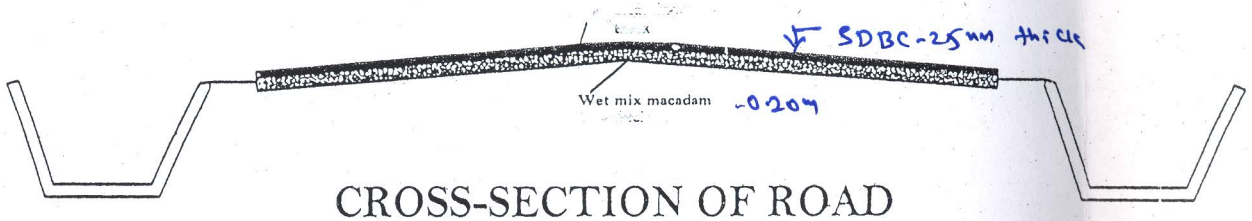
AE

EE(PTP) 12/01

Name of work : Improvements to Roads Draind and Asphalting at Vinayakanagar Balance raods in ward No 11 (Kuvempunagar) in Vidyaranyapura Sub Division

Assistant Engineer
Ward No 11

Assistant Executive Engineer
Vidyaranyapura Sub Division



CROSS-SECTION OF ROAD

INDEX

- Wet mix macadam
- bituminous concrete

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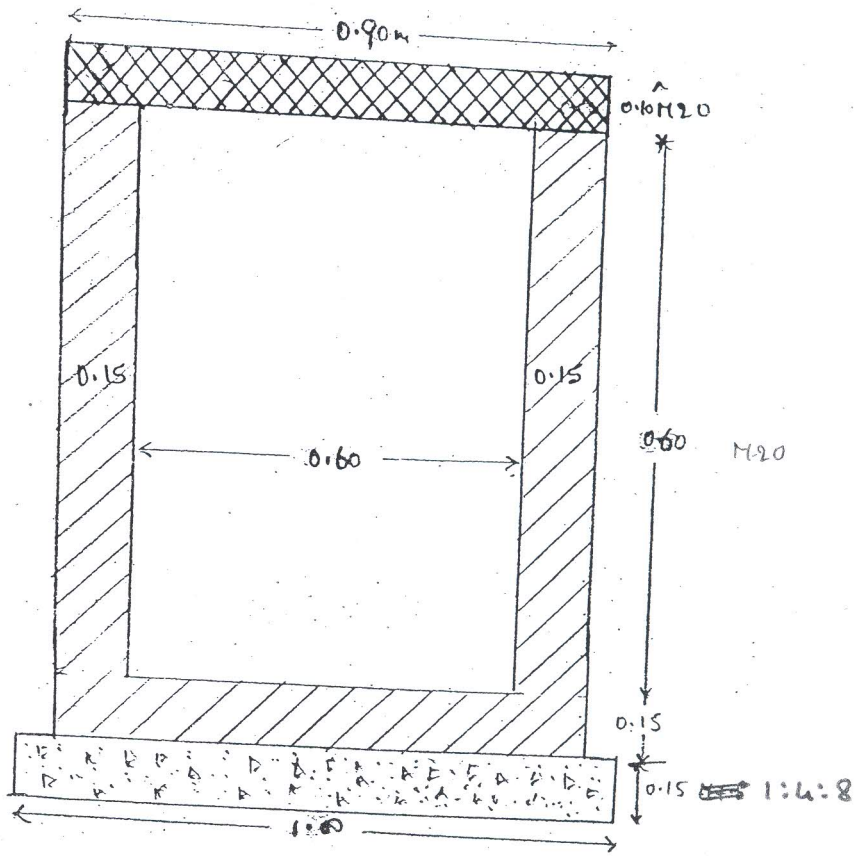
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97.



CROSS SECTION OF CC DRAIN

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ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ,
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ. ಪಾ., ಬೆಂಗಳೂರು-97